

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1161	100.000
2 - James Towers Way		ONE HOUR	✓	754	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	175	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1029	132
	2 - James Towers Way	753	0	1
	3 - Garstang Road (A6) South	172	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	6	3
	2 - James Towers Way	9	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.87	19.53	6.6	C	1065	1598
2 - James Towers Way	0.58	6.65	1.5	A	692	1038
3 - Garstang Road (A6) South	0.22	5.13	0.3	A	161	241

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	874	219	2	1468	0.595	868	693	0.0	1.5	6.275	A
2 - James Towers Way	568	142	99	1448	0.392	565	772	0.0	0.7	4.417	A
3 - Garstang Road (A6) South	132	33	564	1034	0.127	131	99	0.0	0.1	3.986	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1044	261	3	1468	0.711	1040	830	1.5	2.5	8.798	A
2 - James Towers Way	678	169	118	1436	0.472	677	924	0.7	1.0	5.160	A
3 - Garstang Road (A6) South	157	39	676	975	0.161	157	119	0.1	0.2	4.400	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1278	320	3	1468	0.871	1263	1016	2.5	6.2	17.471	C
2 - James Towers Way	830	208	144	1421	0.584	828	1123	1.0	1.5	6.595	A
3 - Garstang Road (A6) South	193	48	827	896	0.215	192	145	0.2	0.3	5.116	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1278	320	3	1468	0.871	1277	1018	6.2	6.6	19.525	C
2 - James Towers Way	830	208	145	1420	0.585	830	1135	1.5	1.5	6.651	A
3 - Garstang Road (A6) South	193	48	829	895	0.215	193	146	0.3	0.3	5.128	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1044	261	3	1468	0.711	1059	834	6.6	2.7	9.645	A
2 - James Towers Way	678	169	120	1435	0.472	680	942	1.5	1.0	5.215	A
3 - Garstang Road (A6) South	157	39	679	973	0.162	158	121	0.3	0.2	4.416	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	874	219	2	1468	0.595	878	698	2.7	1.6	6.498	A
2 - James Towers Way	568	142	100	1447	0.392	569	781	1.0	0.7	4.473	A
3 - Garstang Road (A6) South	132	33	568	1032	0.128	132	101	0.2	0.1	4.001	A

2031 + Committed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		2, 3, 1	16.37	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2031 + Committed	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1174	100.000
2 - James Towers Way		ONE HOUR	✓	1048	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	228	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1011	163
	2 - James Towers Way	1046	0	2
	3 - Garstang Road (A6) South	227	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	0	0
	2 - James Towers Way	0	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.88	19.76	6.8	C	1077	1616
2 - James Towers Way	0.82	14.49	4.5	B	962	1442
3 - Garstang Road (A6) South	0.35	7.59	0.5	A	209	314

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	884	221	0.75	1469	0.602	878	953	0.0	1.5	6.030	A
2 - James Towers Way	789	197	122	1434	0.550	784	757	0.0	1.2	5.501	A
3 - Garstang Road (A6) South	172	43	783	919	0.187	171	123	0.0	0.2	4.805	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1055	264	0.90	1469	0.718	1051	1141	1.5	2.5	8.539	A
2 - James Towers Way	942	236	146	1419	0.664	939	906	1.2	1.9	7.452	A
3 - Garstang Road (A6) South	205	51	937	838	0.245	205	148	0.2	0.3	5.683	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1293	323	1	1469	0.880	1277	1391	2.5	6.3	17.506	C
2 - James Towers Way	1154	288	177	1401	0.824	1144	1101	1.9	4.3	13.550	B
3 - Garstang Road (A6) South	251	63	1142	730	0.344	250	180	0.3	0.5	7.491	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1293	323	1	1469	0.880	1291	1401	6.3	6.8	19.760	C
2 - James Towers Way	1154	288	179	1400	0.824	1153	1113	4.3	4.5	14.493	B
3 - Garstang Road (A6) South	251	63	1151	725	0.346	251	181	0.5	0.5	7.588	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1055	264	0.90	1469	0.718	1072	1155	6.8	2.6	9.417	A
2 - James Towers Way	942	236	149	1418	0.665	952	924	4.5	2.0	7.886	A
3 - Garstang Road (A6) South	205	51	950	831	0.247	206	151	0.5	0.3	5.767	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	884	221	0.75	1469	0.602	888	962	2.6	1.5	6.243	A
2 - James Towers Way	789	197	123	1433	0.551	792	766	2.0	1.2	5.644	A
3 - Garstang Road (A6) South	172	43	791	915	0.188	172	125	0.3	0.2	4.849	A

2031 + 330 Dev No Connection, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		2, 3, 1	13.86	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2031 + 330 Dev No Connection	AM	ONE HOUR	07:00	08:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1164	100.000
2 - James Towers Way		ONE HOUR	✓	759	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	178	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1031	133
	2 - James Towers Way	758	0	1
	3 - Garstang Road (A6) South	175	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	6	3
	2 - James Towers Way	9	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.87	19.84	6.7	C	1068	1602
2 - James Towers Way	0.59	6.72	1.5	A	696	1045
3 - Garstang Road (A6) South	0.22	5.17	0.3	A	163	245

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	876	219	2	1468	0.597	870	699	0.0	1.5	6.297	A
2 - James Towers Way	571	143	99	1447	0.395	569	773	0.0	0.7	4.451	A
3 - Garstang Road (A6) South	134	34	568	1032	0.130	133	100	0.0	0.1	4.004	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1046	262	3	1468	0.713	1042	837	1.5	2.5	8.853	A
2 - James Towers Way	682	171	119	1435	0.475	681	926	0.7	1.0	5.194	A
3 - Garstang Road (A6) South	160	40	680	973	0.165	160	120	0.1	0.2	4.427	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1282	320	3	1468	0.873	1266	1025	2.5	6.3	17.695	C
2 - James Towers Way	836	209	145	1420	0.588	833	1125	1.0	1.5	6.661	A
3 - Garstang Road (A6) South	196	49	832	893	0.220	196	146	0.2	0.3	5.161	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1282	320	3	1468	0.873	1280	1027	6.3	6.7	19.840	C
2 - James Towers Way	836	209	146	1419	0.589	836	1137	1.5	1.5	6.721	A
3 - Garstang Road (A6) South	196	49	835	892	0.220	196	147	0.3	0.3	5.174	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1046	262	3	1468	0.713	1062	841	6.7	2.7	9.727	A
2 - James Towers Way	682	171	121	1434	0.476	685	944	1.5	1.0	5.249	A
3 - Garstang Road (A6) South	160	40	684	971	0.165	160	122	0.3	0.2	4.444	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	876	219	2	1468	0.597	881	704	2.7	1.6	6.522	A
2 - James Towers Way	571	143	101	1446	0.395	573	782	1.0	0.7	4.495	A
3 - Garstang Road (A6) South	134	34	572	1030	0.130	134	101	0.2	0.2	4.020	A

2031 + 330 Dev No Connection, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		2, 3, 1	16.96	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2031 + 330 Dev No Connection	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1182	100.000
2 - James Towers Way		ONE HOUR	✓	1051	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	230	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1016	166
	2 - James Towers Way	1049	0	2
	3 - Garstang Road (A6) South	229	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	0	0
	2 - James Towers Way	0	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.89	20.68	7.1	C	1085	1627
2 - James Towers Way	0.83	14.80	4.6	B	964	1447
3 - Garstang Road (A6) South	0.35	7.65	0.5	A	211	317

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	890	222	0.75	1469	0.606	884	956	0.0	1.5	6.090	A
2 - James Towers Way	791	198	124	1432	0.552	786	760	0.0	1.2	5.532	A
3 - Garstang Road (A6) South	173	43	785	918	0.189	172	126	0.0	0.2	4.823	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1063	266	0.90	1469	0.723	1059	1146	1.5	2.5	8.684	A
2 - James Towers Way	945	236	149	1418	0.666	942	911	1.2	2.0	7.517	A
3 - Garstang Road (A6) South	207	52	940	836	0.247	206	150	0.2	0.3	5.712	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1301	325	1	1469	0.886	1285	1397	2.5	6.6	18.141	C
2 - James Towers Way	1157	289	180	1399	0.827	1147	1106	2.0	4.4	13.790	B
3 - Garstang Road (A6) South	253	63	1145	728	0.348	252	183	0.3	0.5	7.551	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1301	325	1	1469	0.886	1299	1406	6.6	7.1	20.684	C
2 - James Towers Way	1157	289	182	1398	0.828	1156	1118	4.4	4.6	14.798	B
3 - Garstang Road (A6) South	253	63	1154	724	0.350	253	185	0.5	0.5	7.651	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1063	266	0.90	1469	0.723	1080	1160	7.1	2.7	9.648	A
2 - James Towers Way	945	236	152	1416	0.667	955	929	4.6	2.1	7.973	A
3 - Garstang Road (A6) South	207	52	953	829	0.249	208	154	0.5	0.3	5.796	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	890	222	0.75	1469	0.606	894	966	2.7	1.6	6.315	A
2 - James Towers Way	791	198	126	1432	0.553	794	770	2.1	1.3	5.678	A
3 - Garstang Road (A6) South	173	43	793	913	0.190	174	127	0.3	0.2	4.869	A

2031 + 330 Dev 50% WL, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		2, 3, 1	13.03	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 + 330 Dev 50% WL	AM	ONE HOUR	07:00	08:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1163	100.000
2 - James Towers Way		ONE HOUR	✓	758	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1030	133
	2 - James Towers Way	757	0	1
	3 - Garstang Road (A6) South	176	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	0	0
	2 - James Towers Way	0	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.87	18.72	6.4	C	1067	1601
2 - James Towers Way	0.59	6.16	1.4	A	696	1043
3 - Garstang Road (A6) South	0.22	5.18	0.3	A	164	246

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	876	219	2	1468	0.596	870	699	0.0	1.5	5.959	A
2 - James Towers Way	571	143	99	1447	0.394	568	773	0.0	0.6	4.084	A
3 - Garstang Road (A6) South	135	34	567	1032	0.131	134	100	0.0	0.1	4.007	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1046	261	3	1468	0.712	1042	838	1.5	2.4	8.370	A
2 - James Towers Way	681	170	119	1435	0.475	680	925	0.6	0.9	4.762	A
3 - Garstang Road (A6) South	161	40	680	973	0.165	161	120	0.1	0.2	4.430	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1280	320	3	1468	0.873	1266	1025	2.4	6.0	16.774	C
2 - James Towers Way	835	209	145	1420	0.588	833	1125	0.9	1.4	6.106	A
3 - Garstang Road (A6) South	197	49	831	893	0.221	197	146	0.2	0.3	5.166	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1280	320	3	1468	0.873	1279	1027	6.0	6.4	18.721	C
2 - James Towers Way	835	209	146	1419	0.588	835	1136	1.4	1.4	6.156	A
3 - Garstang Road (A6) South	197	49	833	892	0.221	197	147	0.3	0.3	5.178	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1046	261	3	1468	0.712	1061	841	6.4	2.6	9.151	A
2 - James Towers Way	681	170	121	1434	0.475	683	942	1.4	0.9	4.809	A
3 - Garstang Road (A6) South	161	40	683	972	0.166	161	122	0.3	0.2	4.444	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	876	219	2	1468	0.596	880	704	2.6	1.5	6.160	A
2 - James Towers Way	571	143	101	1446	0.395	572	781	0.9	0.7	4.121	A
3 - Garstang Road (A6) South	135	34	571	1030	0.131	135	101	0.2	0.2	4.022	A

2031 + 330 Dev 50% WL, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		2, 3, 1	18.02	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 + 330 Dev 50% WL	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1182	100.000
2 - James Towers Way		ONE HOUR	✓	1050	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	230	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1015	167
	2 - James Towers Way	1048	0	2
	3 - Garstang Road (A6) South	229	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	6	3
	2 - James Towers Way	9	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.89	21.77	7.5	C	1085	1627
2 - James Towers Way	0.83	16.07	5.0	C	963	1445
3 - Garstang Road (A6) South	0.35	7.64	0.5	A	211	317

Main Results for each time segment

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	890	222	0.75	1469	0.606	884	955	0.0	1.6	6.422	A
2 - James Towers Way	790	198	125	1432	0.552	785	759	0.0	1.3	6.019	A
3 - Garstang Road (A6) South	173	43	784	918	0.189	172	126	0.0	0.2	4.819	A

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1063	266	0.90	1469	0.723	1058	1144	1.6	2.7	9.155	A
2 - James Towers Way	944	236	150	1417	0.666	941	910	1.3	2.1	8.176	A
3 - Garstang Road (A6) South	207	52	939	837	0.247	206	151	0.2	0.3	5.706	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1301	325	1	1469	0.886	1284	1395	2.7	6.9	19.022	C
2 - James Towers Way	1156	289	181	1398	0.827	1146	1104	2.1	4.8	14.919	B
3 - Garstang Road (A6) South	253	63	1143	729	0.347	252	184	0.3	0.5	7.535	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1301	325	1	1469	0.886	1299	1405	6.9	7.5	21.766	C
2 - James Towers Way	1156	289	184	1397	0.827	1155	1117	4.8	5.0	16.071	C
3 - Garstang Road (A6) South	253	63	1153	724	0.350	253	186	0.5	0.5	7.641	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1063	266	0.90	1469	0.723	1081	1160	7.5	2.9	10.227	B
2 - James Towers Way	944	236	153	1415	0.667	955	929	5.0	2.2	8.710	A
3 - Garstang Road (A6) South	207	52	953	829	0.249	208	155	0.5	0.3	5.796	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	890	222	0.75	1469	0.606	895	965	2.9	1.7	6.673	A
2 - James Towers Way	790	198	126	1431	0.552	794	769	2.2	1.4	6.190	A
3 - Garstang Road (A6) South	173	43	792	914	0.190	174	128	0.3	0.2	4.865	A

2031 + 280 Dev No Connection, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		2, 3, 1	13.03	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2031 + 280 Dev No Connection	AM	ONE HOUR	07:00	08:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Garstang Road (A6) North		ONE HOUR	✓	1163	100.000
2 - James Towers Way		ONE HOUR	✓	758	100.000
3 - Garstang Road (A6) South		ONE HOUR	✓	178	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	1030	133
	2 - James Towers Way	757	0	1
	3 - Garstang Road (A6) South	175	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - Garstang Road (A6) North	2 - James Towers Way	3 - Garstang Road (A6) South
From	1 - Garstang Road (A6) North	0	0	0
	2 - James Towers Way	0	0	0
	3 - Garstang Road (A6) South	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Garstang Road (A6) North	0.87	18.72	6.4	C	1067	1601
2 - James Towers Way	0.59	6.16	1.4	A	696	1043
3 - Garstang Road (A6) South	0.22	5.17	0.3	A	163	245

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	876	219	2	1468	0.596	870	698	0.0	1.5	5.959	A
2 - James Towers Way	571	143	99	1447	0.394	568	773	0.0	0.6	4.084	A
3 - Garstang Road (A6) South	134	34	567	1032	0.130	133	100	0.0	0.1	4.003	A

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1046	261	3	1468	0.712	1042	837	1.5	2.4	8.370	A
2 - James Towers Way	681	170	119	1435	0.475	680	925	0.6	0.9	4.762	A
3 - Garstang Road (A6) South	160	40	680	973	0.164	160	120	0.1	0.2	4.425	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1280	320	3	1468	0.873	1266	1024	2.4	6.0	16.774	C
2 - James Towers Way	835	209	145	1420	0.588	833	1125	0.9	1.4	6.106	A
3 - Garstang Road (A6) South	196	49	831	893	0.219	196	146	0.2	0.3	5.158	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1280	320	3	1468	0.873	1279	1026	6.0	6.4	18.721	C
2 - James Towers Way	835	209	146	1419	0.588	835	1136	1.4	1.4	6.156	A
3 - Garstang Road (A6) South	196	49	833	892	0.220	196	147	0.3	0.3	5.170	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	1046	261	3	1468	0.712	1061	840	6.4	2.6	9.151	A
2 - James Towers Way	681	170	121	1434	0.475	683	942	1.4	0.9	4.809	A
3 - Garstang Road (A6) South	160	40	683	972	0.165	160	122	0.3	0.2	4.439	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Garstang Road (A6) North	876	219	2	1468	0.596	880	703	2.6	1.5	6.160	A
2 - James Towers Way	571	143	101	1446	0.395	572	781	0.9	0.7	4.120	A
3 - Garstang Road (A6) South	134	34	571	1030	0.130	134	101	0.2	0.2	4.020	A